

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19321 - L2 Version 1
Chandra X-Ray Center

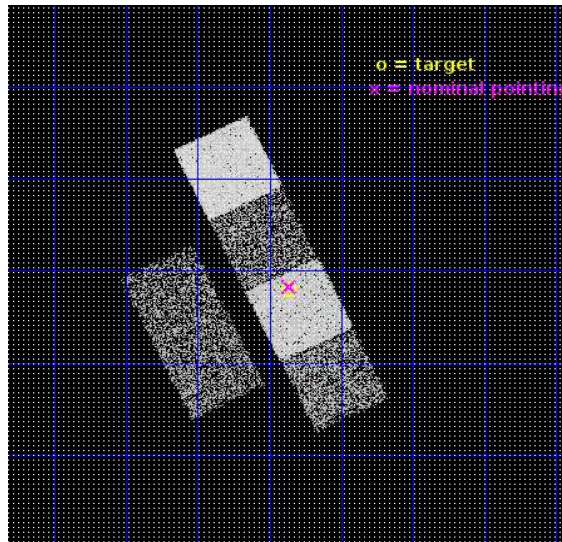
L2 Processing Date : Nov 26 2016

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

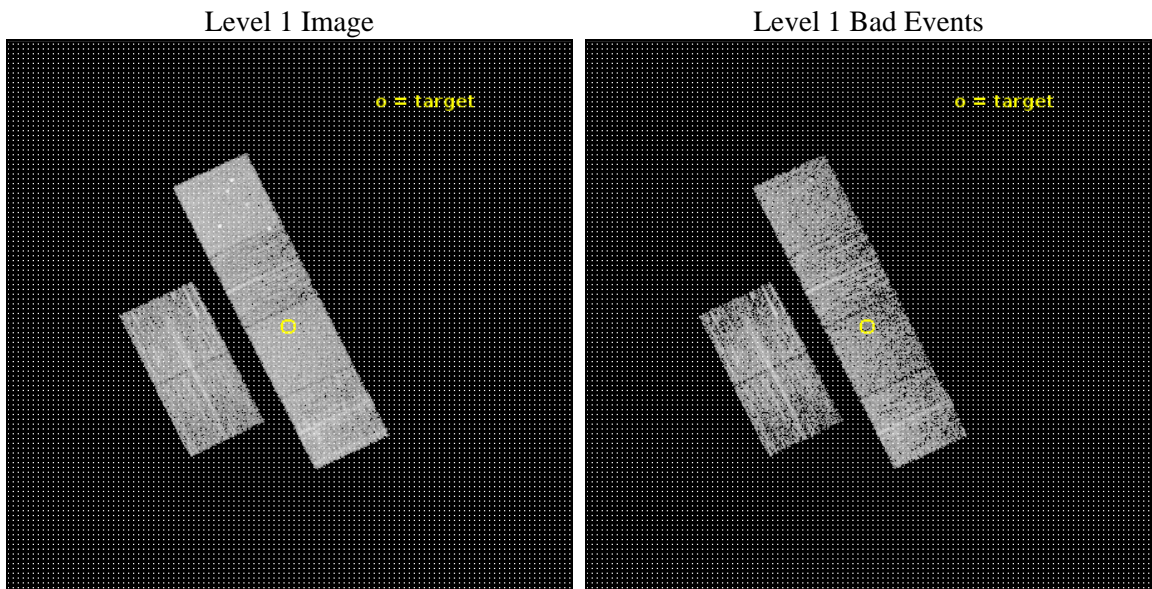
seq_num	601278	Sequence number
obs_id	19321	Observation id
title	A homogeneous view of X-ray halos in massive early-type galaxies	P
observer	Andy Goulding	Principal investigator
object	NGC4753	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	193.092083	Observer's specified target RA [deg]
dec_targ	-1.199722	Observer's specified target Dec [deg]
ra_nom	193.09004284019	Nominal RA [deg]
dec_nom	-1.1953360558798	Nominal Dec [deg]
roll_nom	64.03590965301	Nominal Roll [deg]
revision	1	Processing version of data
ontime	3954.4470552206	Sum of GTIs [s]
livetime	3904.3734655253	Livetime [s]
ontime2	3948.0061542988	Sum of GTIs [s]
ontime3	3954.3239351511	Sum of GTIs [s]
ontime5	3954.4060151577	Sum of GTIs [s]
ontime6	3954.364975214	Sum of GTIs [s]
ontime7	3954.4470552206	Sum of GTIs [s]
ontime8	3954.2828952074	Sum of GTIs [s]
l2events	44185	Number of level 2 events



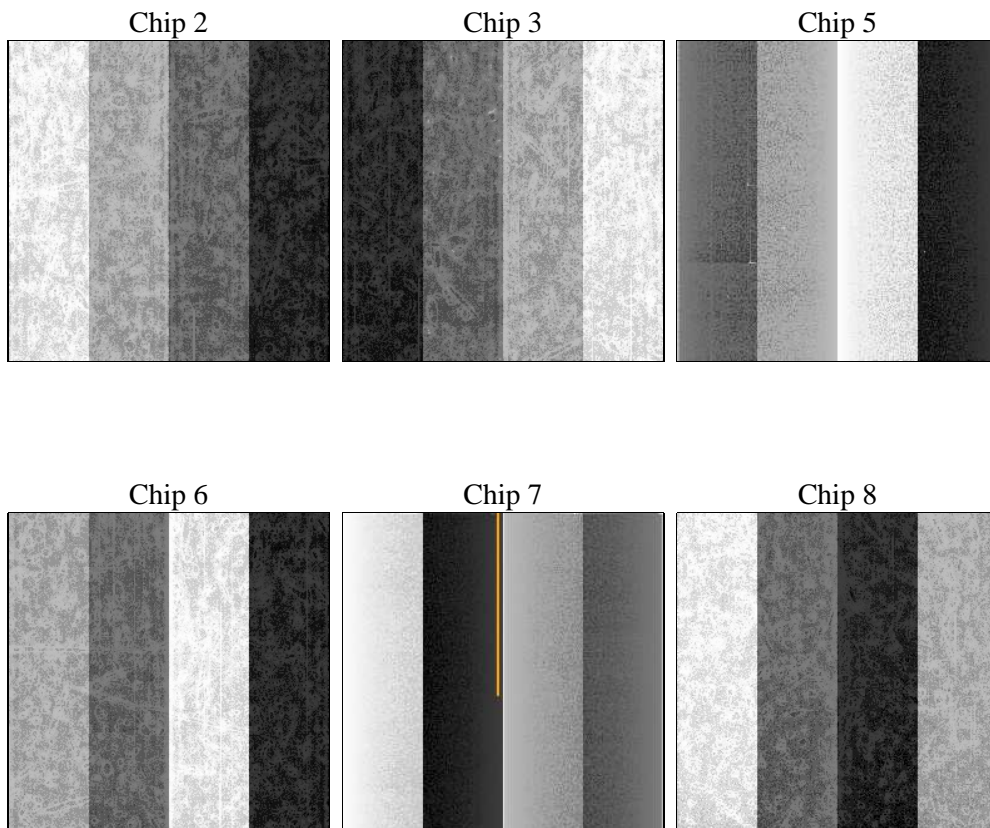
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	4000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	3954.4470552206	Sum of GTIs [s]
caldsver	4.7.2	 	ontime2	3948.0061542988	Sum of GTIs [s]
date	2016-11-26T06:34:03	Date and time of file creation	ontime3	3954.3239351511	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	3954.4060151577	Sum of GTIs [s]
			ontime6	3954.364975214	Sum of GTIs [s]
			ontime7	3954.4470552206	Sum of GTIs [s]
			ontime8	3954.2828952074	Sum of GTIs [s]
			l1events	188418	Number of level 1 events

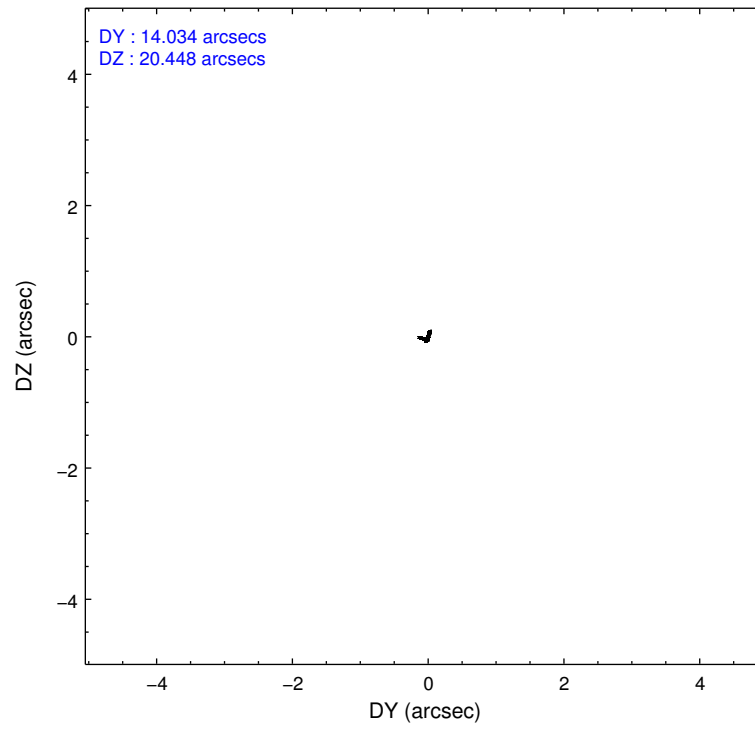
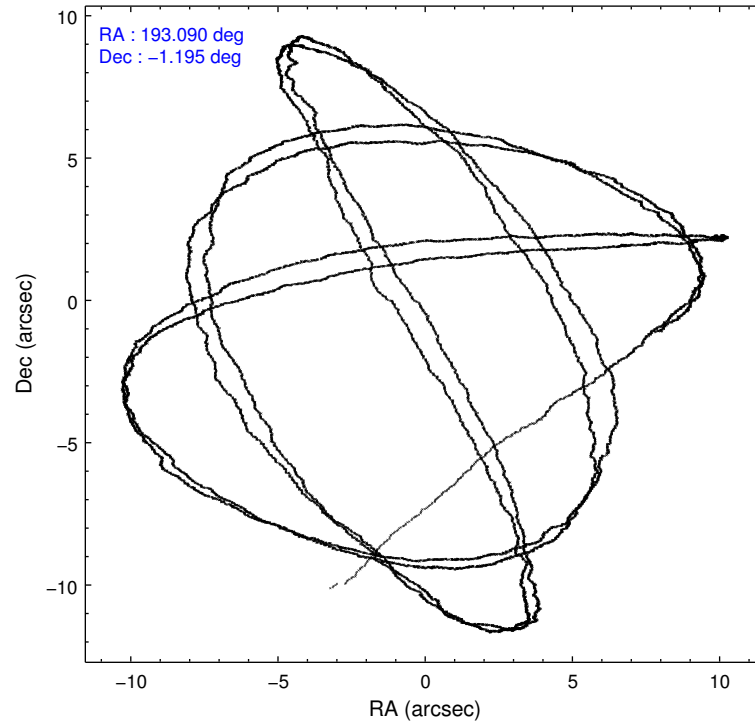
2.1.4 Events

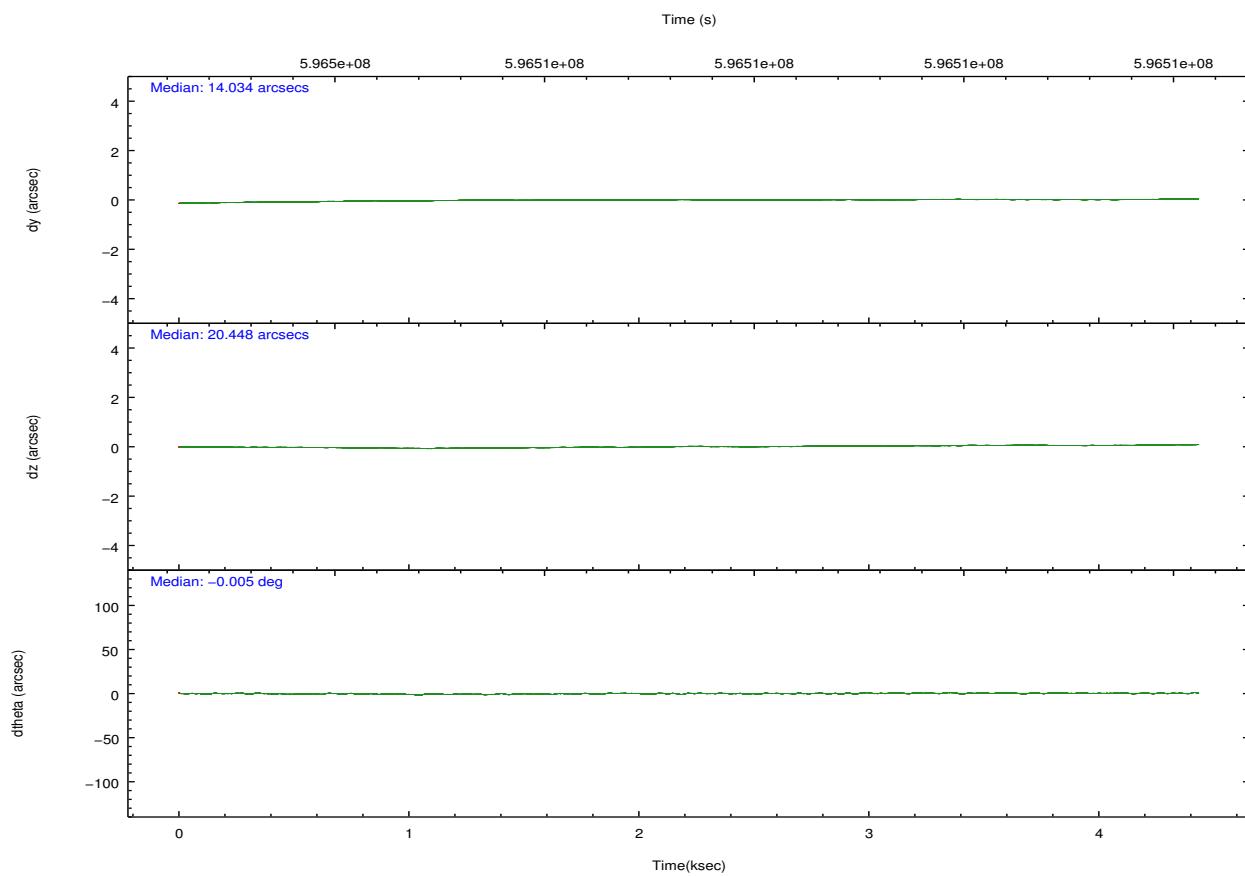
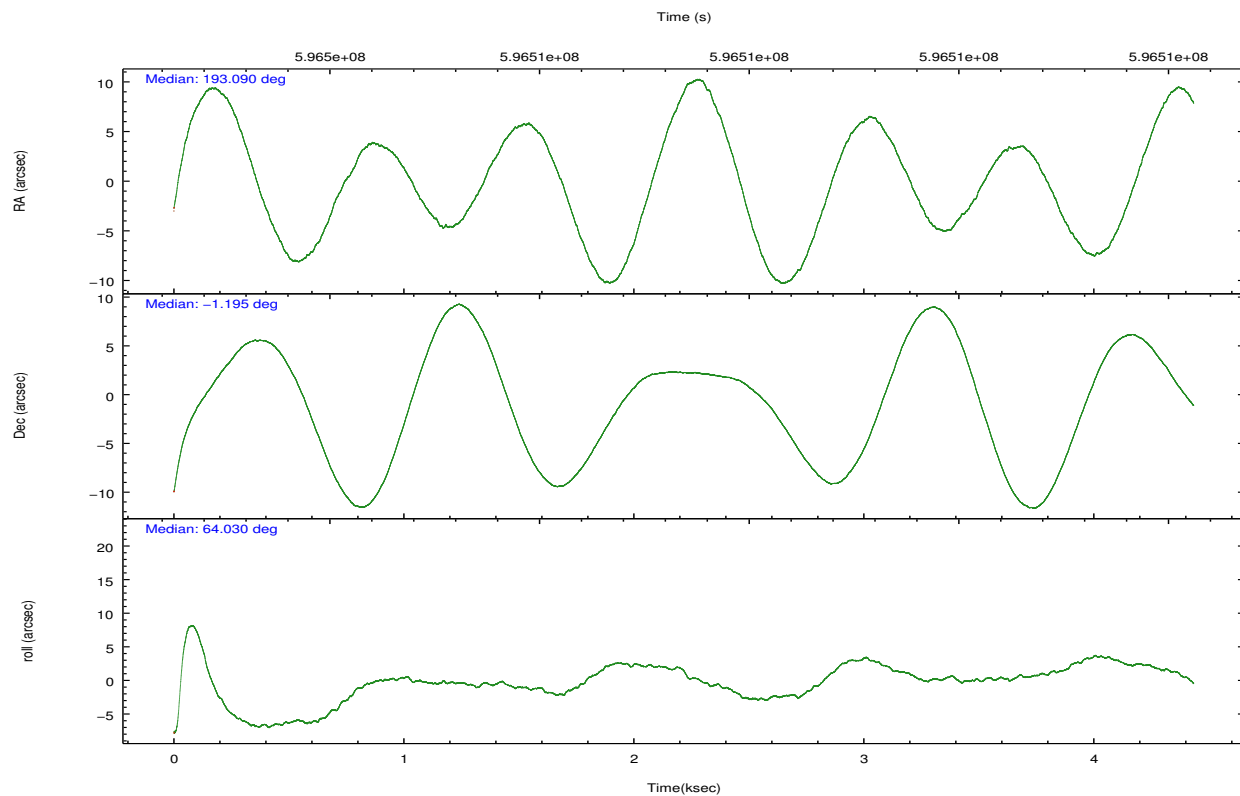
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	27597	23356	42857	25331	33975	35302	grade 0 events	1004	996	2597	963	1293	2964
rejected events	24741	20658	21432	22351	19118	25372		3%	4%	6%	3%	3%	8%
rejected %	89%	88%	50%	88%	56%	71%	grade 1 events	13	19	84	12	50	26
								0%	0%	0%	0%	0%	0%
							grade 2 events	722	580	6585	732	3090	2378
								2%	2%	15%	2%	9%	6%
							grade 3 events	292	294	678	305	1228	1003
								1%	1%	1%	1%	3%	2%
							grade 4 events	293	253	731	294	1159	951
								1%	1%	1%	1%	3%	2%
							grade 5 events	1127	1247	3056	1257	3381	1890
								4%	5%	7%	4%	9%	5%
							grade 6 events	550	580	10877	693	8105	2646
								1%	2%	25%	2%	23%	7%
							grade 7 events	23596	19387	18249	21075	15669	23444
								85%	83%	42%	83%	46%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	193.092218	193.0900428401948	CCD I2 on	O1	Y
[deg] Pointing Dec	-1.222767	-1.195336055879764	CCD I3 on	O2	Y
[deg] Pointing Roll	63.879385	64.03590965300953	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	596504882.184000	596503797.75848	CCD S5 on	N	N
Observation start date	2016-11-25T23:46:54	2016-11-25T23:29:57	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	596508882.184000	596509944.17133	On-chip summing requested	N	N
Observation end date	2016-11-26T00:53:34	2016-11-26T01:12:24	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



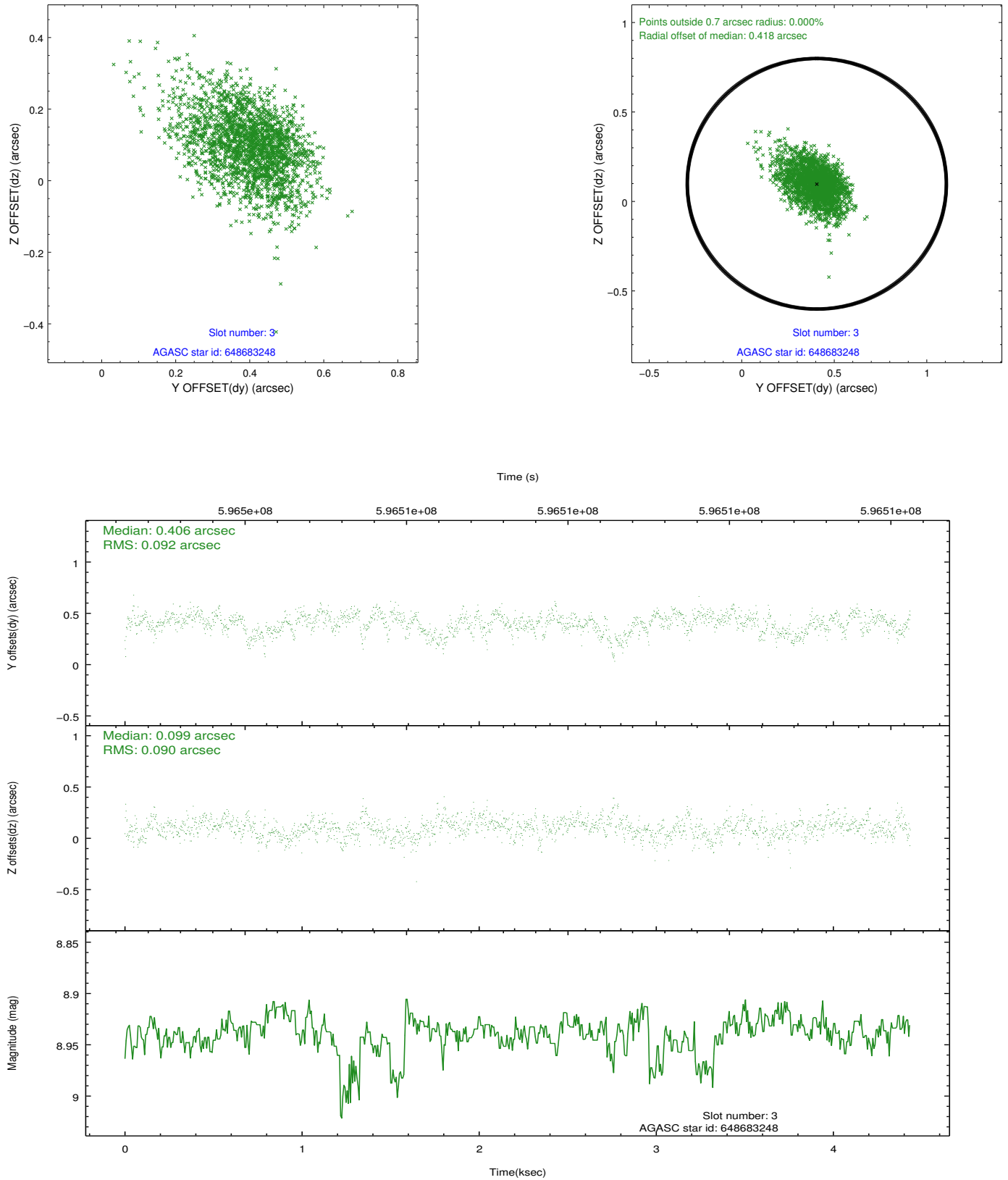


Slot Statistics

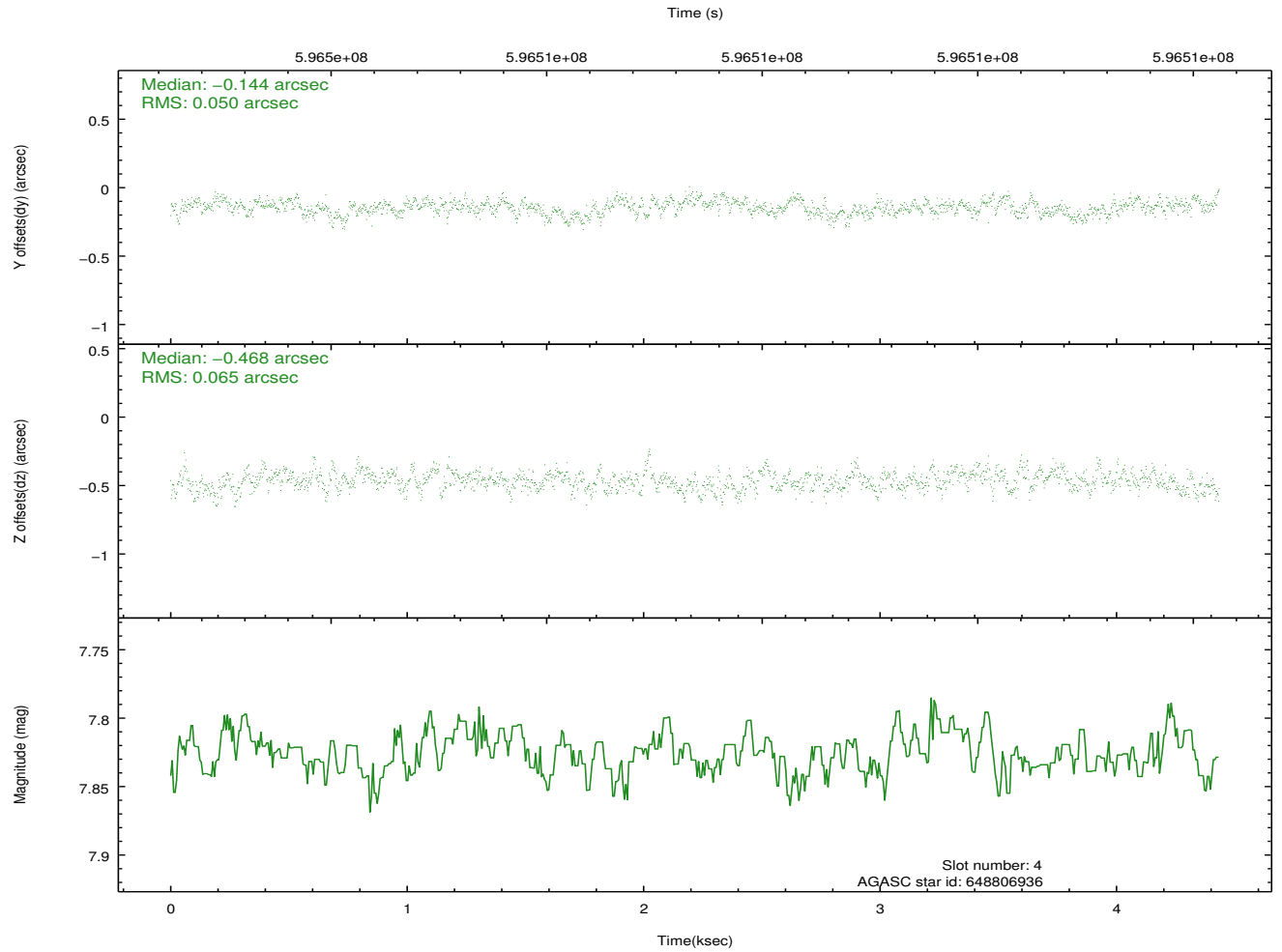
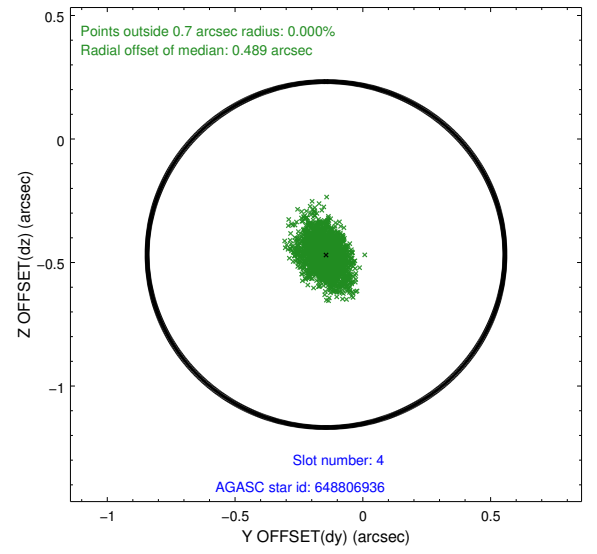
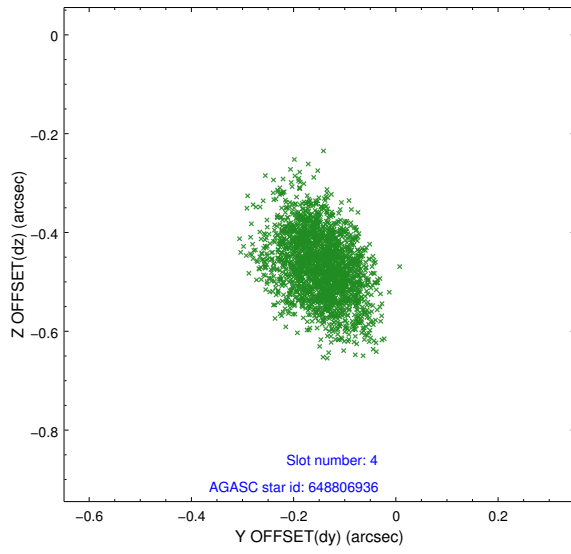
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.95	1082	-0.177	-0.045	0.006	0.010	0.000000	0.000000	-767.11	-1741.98
1	FID		ACIS-S-4	7.06	1082	0.404	0.098	0.005	0.010	0.000000	0.000000	2146.08	165.24
2	FID		ACIS-S-5	7.07	1082	-0.258	-0.044	0.006	0.010	0.000000	0.000000	-1818.28	160.29
3	GUIDE	used	648683248	8.94	2162	0.406	0.099	0.134	0.228	192.240945	-1.504412	-2260.42	2304.60
4	GUIDE	used	648806936	7.83	2164	-0.144	-0.468	0.086	0.142	192.681528	-0.768127	810.66	2046.47
5	GUIDE	used	648807864	7.21	2164	-0.160	-0.219	0.090	0.152	193.050792	-0.929015	883.72	600.65
6	GUIDE	used	648813288	8.90	2160	0.162	0.447	0.129	0.209	193.885851	-1.124604	1574.31	-2407.33
7	GUIDE	used	648815096	8.63	2161	-0.245	0.147	0.151	0.220	193.366988	-0.763719	1919.43	-160.94

2.4 Star Slots

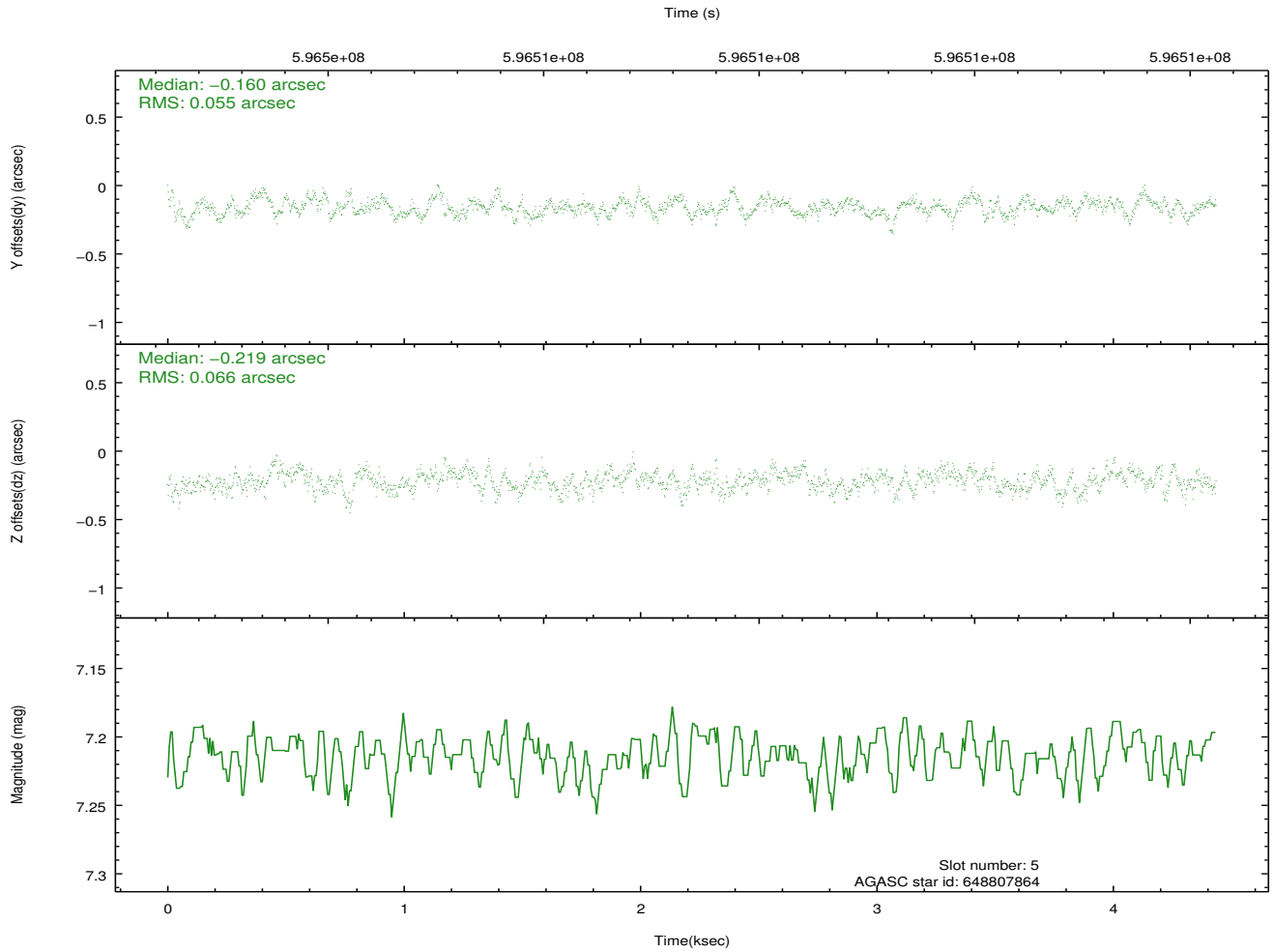
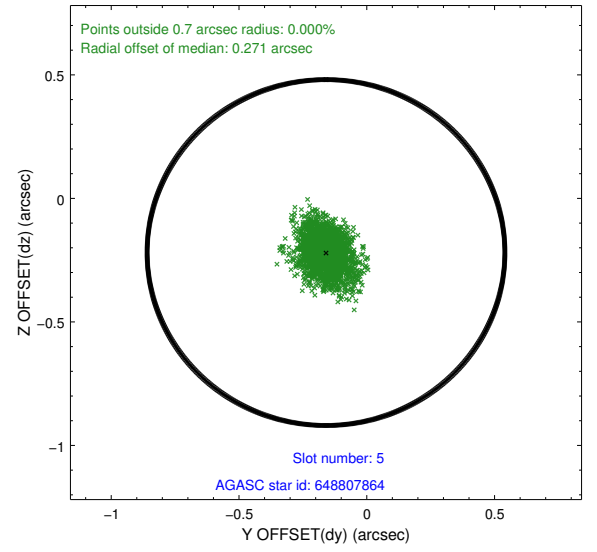
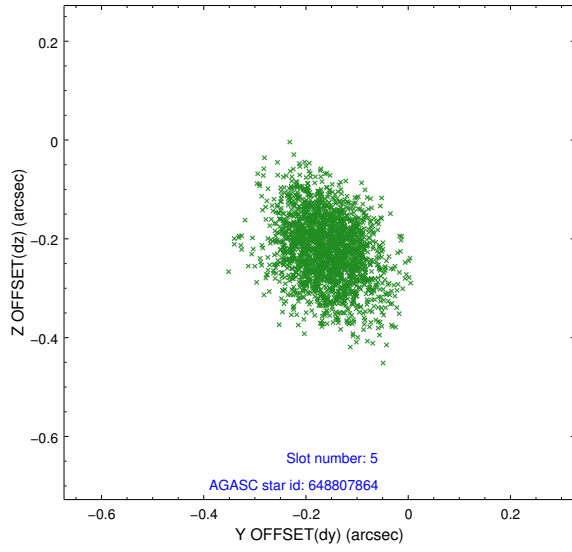
2.4.1 Slot 3



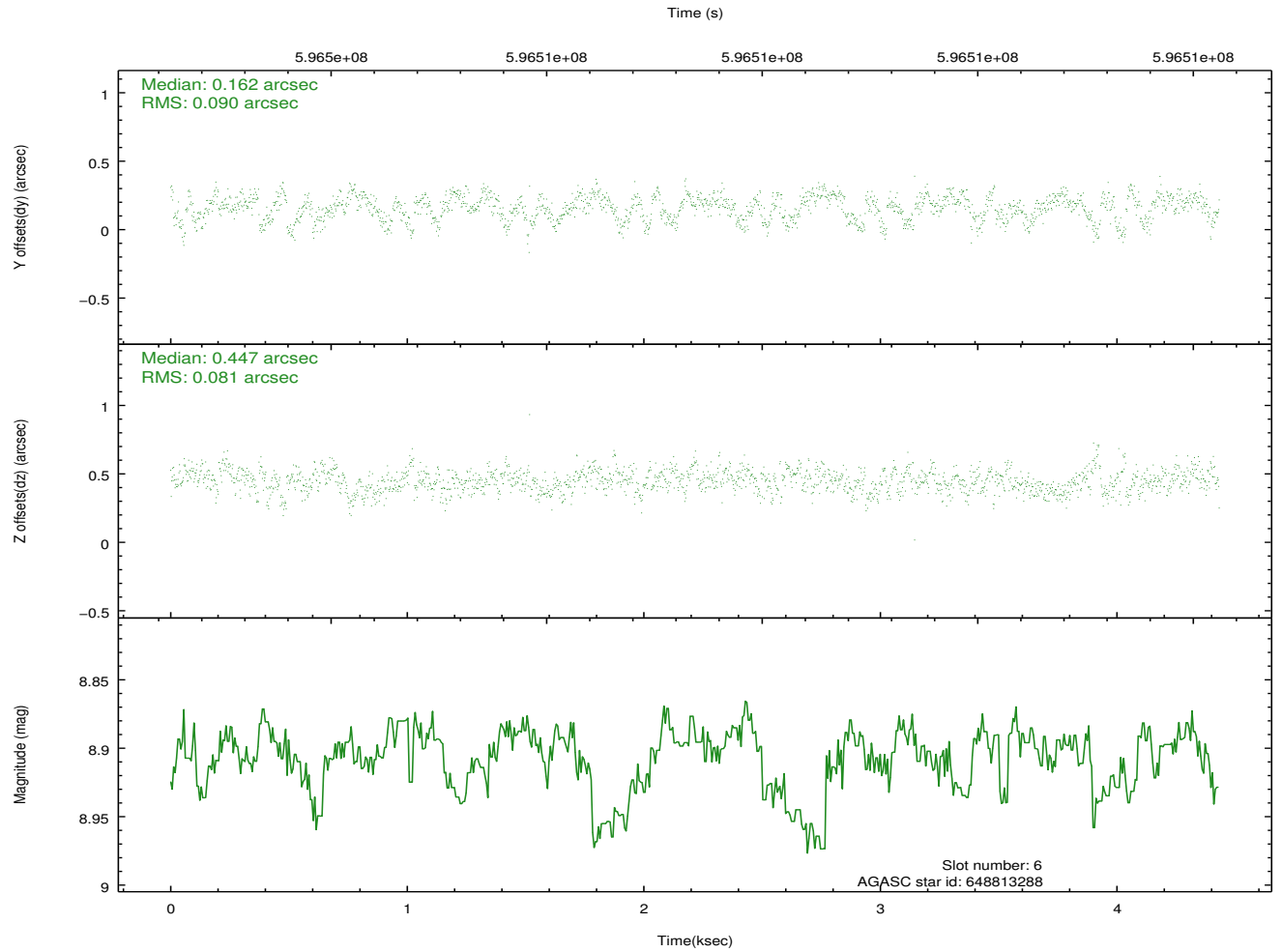
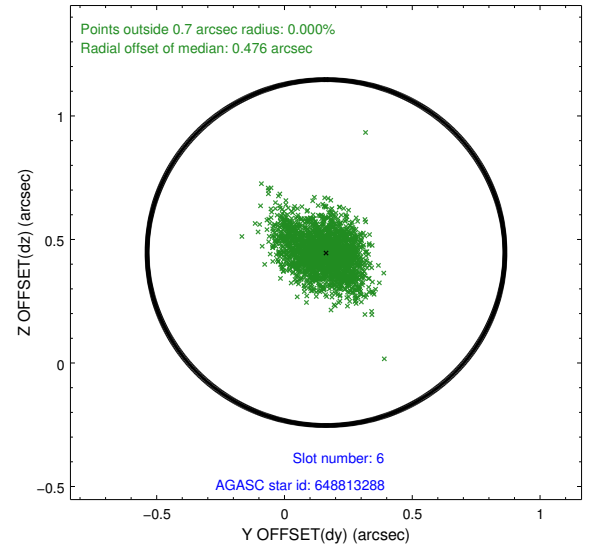
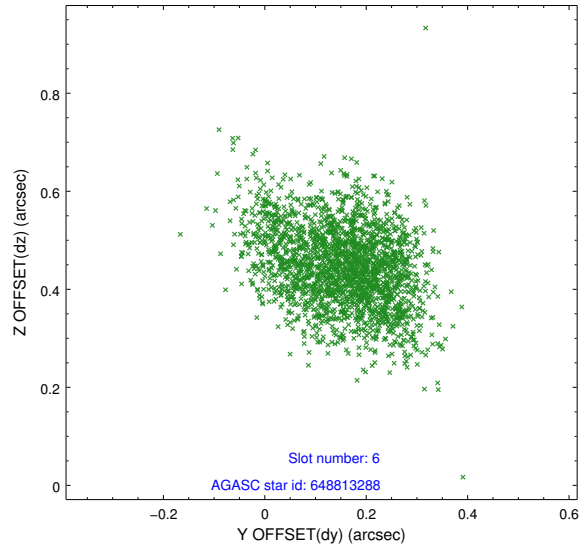
2.4.2 Slot 4



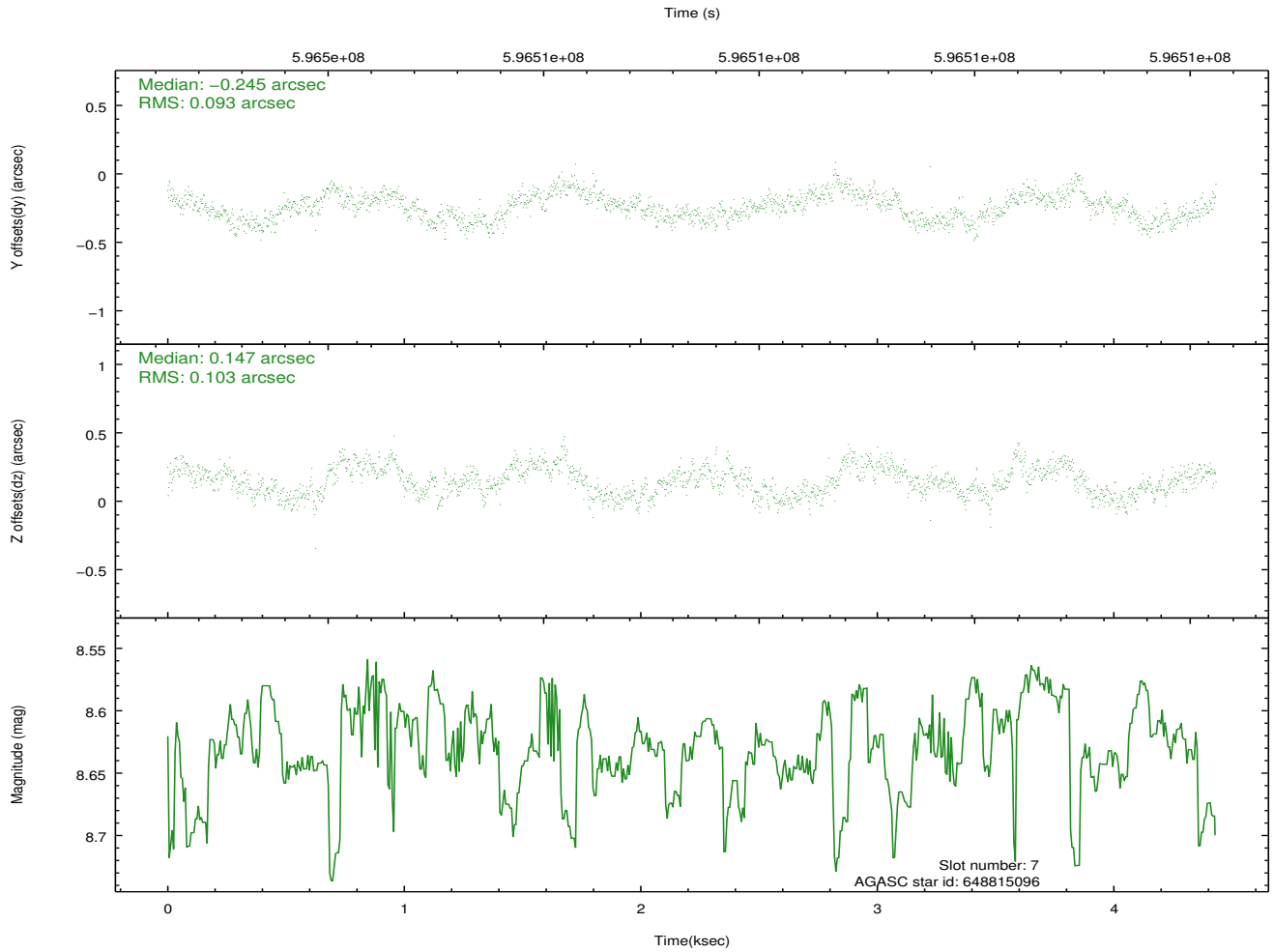
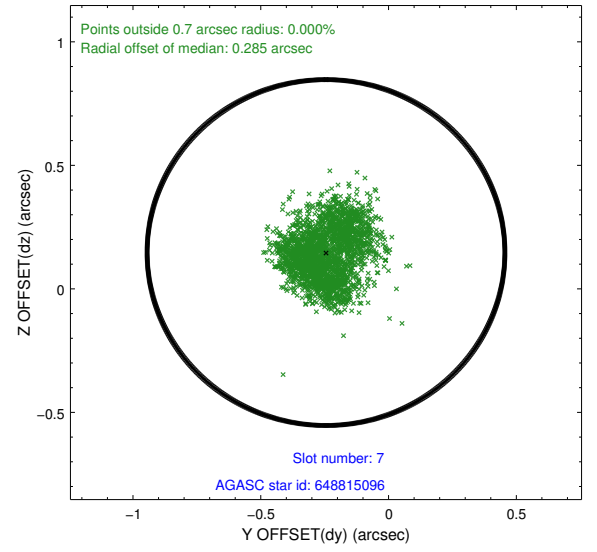
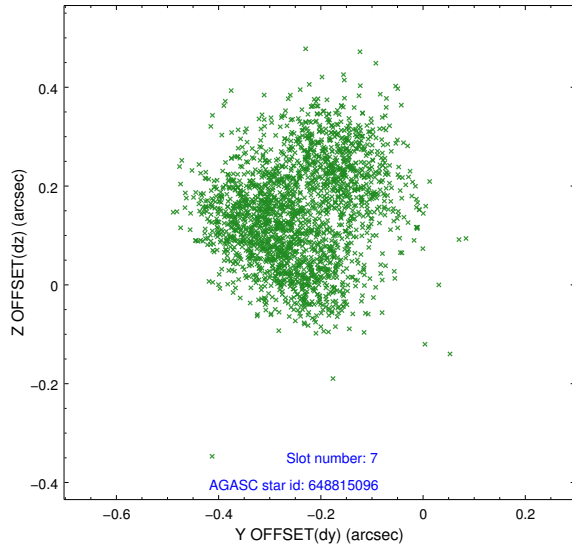
2.4.3 Slot 5



2.4.4 Slot 6

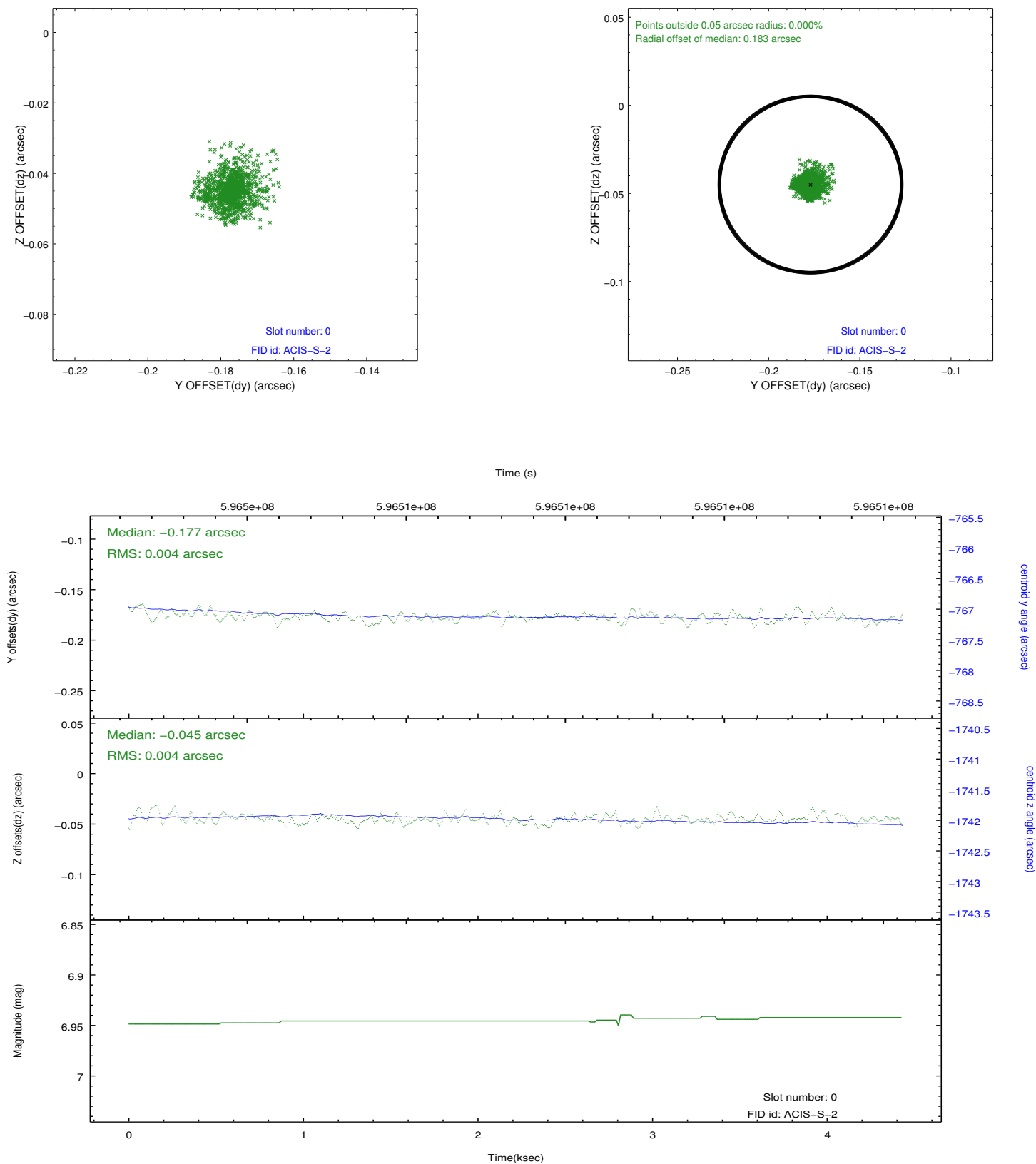


2.4.5 Slot 7

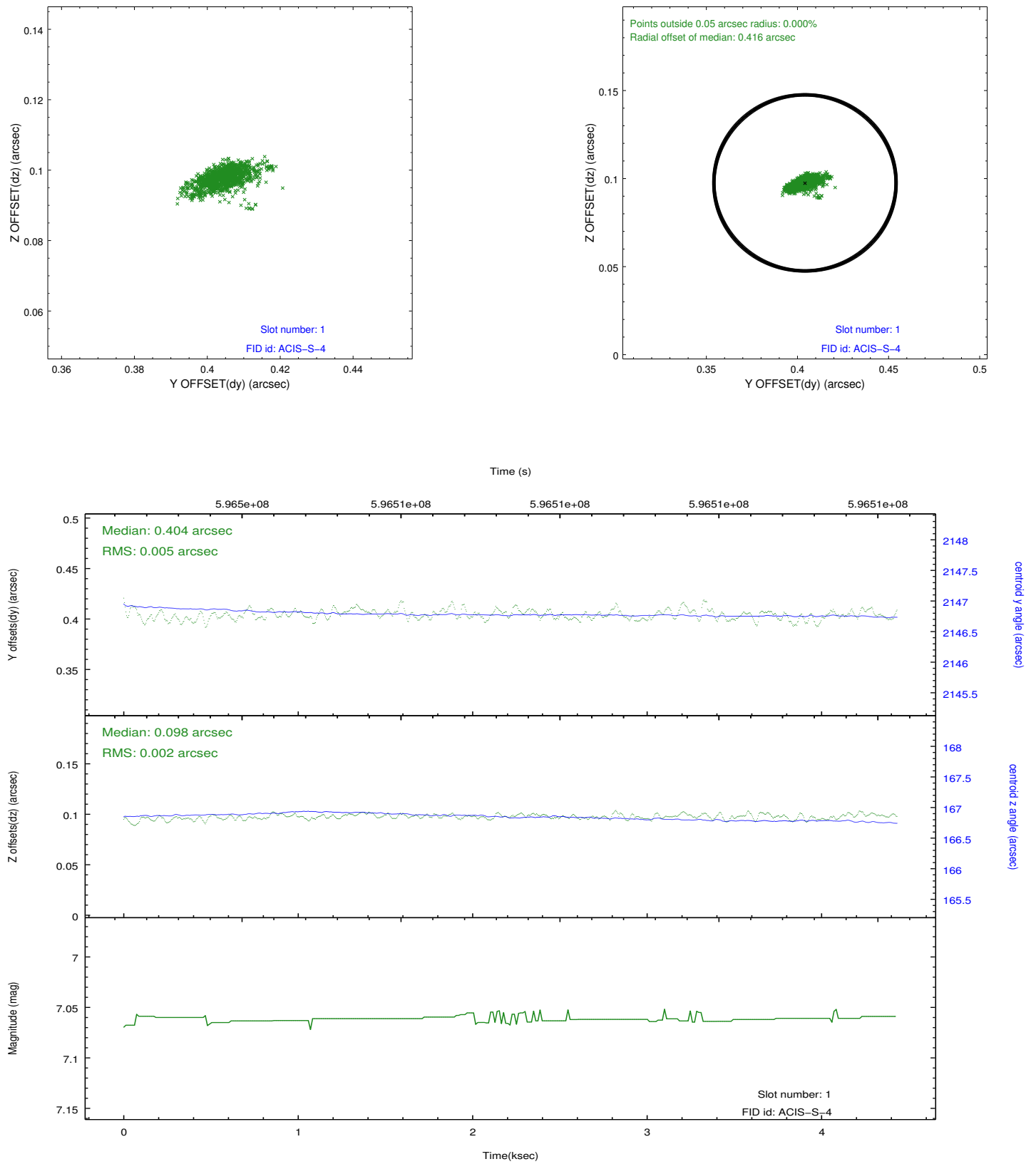


2.5 FID Slots

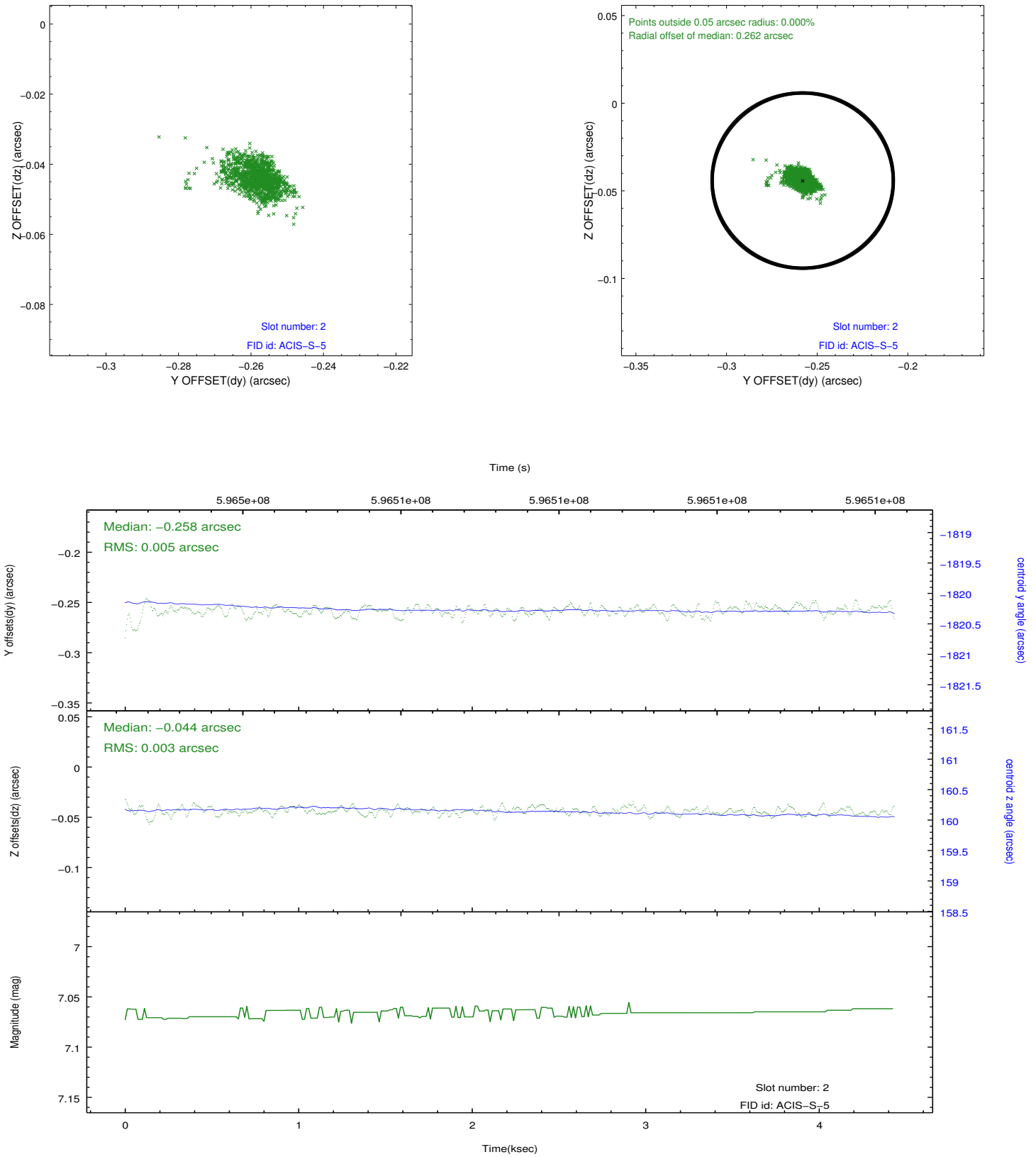
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2016.11.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.9544470552206

A.2 Comments